

What is claimed is:

1. A composition comprising
 - (A) a resin mixture consisting of
 - (A1) from 0.5 to 50.0 % by weight, based on the sum of components A1 + A2, of an epoxidised or maleinated natural or synthetic oil, and
 - (A2) from 50.0 to 99.5 % by weight, based on the sum of components A1 + A2, of a polymerisable or curable monomer or monomer mixture other than A1, and
 - (B) an organophilic layer silicate obtainable by treatment of a natural or synthetic layer silicate with a swelling agent selected from sulfonium, phosphonium and ammonium compounds, but in the case where component A1 is an epoxidised oil, salts of melamine compounds and cyclic amidine compounds are excluded as ammonium compounds.
2. A composition according to claim 1, wherein component A1 is an epoxidised or maleinated oil based on mono- and poly-fatty acids having from 12 to 22 carbon atoms or an epoxidised or maleinated rubber.
3. A composition according to claim 1, wherein component A1 is an epoxidised or maleinated soybean oil or linseed oil.
4. A composition according to claim 1, wherein component A2 is a mixture of a polyisocyanate and a polyol or a mixture of an epoxy resin having more than one 1,2-epoxy group in the molecule and a hardener for the epoxy resin.
5. A composition according to claim 4, wherein component A2 is a mixture of an epoxy resin and a hardener, the epoxy resin being a fluid or viscous polyglycidyl ether or polyglycidyl ester or a mixture of such compounds.
6. A composition according to claim 5, wherein the epoxy resin is bisphenol A diglycidyl ether or bisphenol F diglycidyl ether.
7. A composition according to claim 5, wherein the hardener is an amine, a carboxylic acid, a carboxylic acid anhydride or a phenol.

8. A composition according to claim 4, wherein component A2 is a mixture of a poly-isocyanate having at least two isocyanate groups and a polyol having at least two hydroxyl groups.
9. A composition according to claim 1, wherein for the preparation of the organophilic layer silicate B there is used bentonite, vermiculite, halloysite, saponite, beidellite, nontronite, hectorite, sauconite, stevensite or montmorillonite.
10. A composition according to claim 1, wherein for the preparation of the organophilic layer silicate B there is used a layer silicate of the formula $(\text{Al}_{3.15}\text{Mg}_{0.85})\text{Si}_{8.00}\text{O}_{20}(\text{OH})_4\text{X}_{11.8} \cdot n\text{H}_2\text{O}$, wherein X is an exchangeable cation and some of the hydroxyl groups may have been replaced by fluoride ions.
11. A composition according to claim 1, wherein for the preparation of the organophilic layer silicate B there is used a layer silicate having a layer spacing of from 0.7 nm to 1.2 nm and a cation exchange capacity in the range of from 50 to 200 meq./100 g.
12. A composition according to claim 1 containing from 0.5 to 30 % by weight of component B, based on the weight of component A.
13. A process for the preparation of a nanocomposite, wherein a composition according to claim 1 is solidified by curing or polymerisation of component A.
14. The use of the compositions according to the invention according to claim 1 in the production of paints/varnishes, adhesives, casting resins, coatings, fireproofing agents, thixotropic agents or reinforcing agents.